



ON THE FOUNDATIONS OF PORT AUTHORITIES' STRATEGIC PLANNING: WHAT IS COMMON, WHAT IS NEW, AND WHAT IS DIFFERENT?

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ABSTRACT

Strategic planning is a technique used for military purposes for more than 2,500 years, as a process to formulate medium and long-term goals and objectives and to establish the best way to achieve them. The current definition applied to the business environment arose in the sphere of Harvard University in the mid-1960s with the works of Michael Porter and Igor Ansoff, who can be considered the fathers of modern strategic thinking. In the port sector, strategic planning began to be applied systematically at the end of the 1980s following the works published by the Association of American Port Authorities in 1988 and UNCTAD in 1993. In following these pioneer works and after many years of practical application in ports and terminals, the Technical Association of Ports and Coasts (Spanish section of the PIANC) conducted an in-depth analysis of a sample of 150 Port Authorities. In this work, the main conclusions regarding the three core aspects of any Strategic Plan are summarised: the formulation of the vision, mission, and corporate values.

Keywords: *Strategic Plan; Master Plan; Port Authority; Vision Statement; Mission Statement; Corporate Values; Port Strategy*

1. INTRODUCTION

Strategic Planning is not a novel topic in the Port Industry. In 1988 the American Association of Port Authorities (AAPA) published '*Strategic Planning: A Guide for the Port Industry*' (AAPA 1998). This work is based on the essence of strategic planning defined by Michael Porter (Porter 1979, 1980, 1985) and has inspired many of the practical experiences that have been subsequently carried out in

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this field by many Port Authorities (hereinafter referred as ‘Pas’ or simply ‘Ports’). Shortly thereafter in 1993, the Secretariat of the United Nations Conference on Trade and Development (UNCTAD) published a new monograph under the title “*Strategic Planning for Port Authorities*” (UNCTAD 1993). Both studies characterised strategic planning as a structured process called ‘*Strategic Planning Process*’ (‘SPP’) and suggested a relatively common methodology to tackle Strategic Plans in port environments (‘SPs’ in plural or ‘SP’ in singular).

For the last 30 years, many PAs have developed their Strategic Plans based on these guidelines, which many consider being relatively outdated. For instance, most Ports have implemented different tools departing from the traditional body of the classical SPs discussed by (AAPA 1998) and (UNCTAD 1993). An example of this is the Balanced Scorecard developed in the ‘90s by Robert Kaplan and David Norton (Kaplan and Norton 1995).

To the best of our knowledge, the works published by these pioneers have not been replaced by any updated text that rigorously analyses how the industry has evolved in terms of strategic planning, what elements have been preserved or replaced and more importantly, what are the best practices regarding strategic planning in ports.

In 2018, the Technical Association of Ports and Coasts (Spanish section of the World Association for Waterborne Transport Infrastructure (PIANC)) conducted a Study and Research Group focused on Port Planning Tools and comprised of representatives from the different Port Authorities, Practitioners from Consultancy firms and Researchers from the different Universities. Recently this group completed “*The Strategic Plan: Practical Guide for its drafting and processing in Ports*”, published with the support of the Organismo Público Puertos del Estado (de la Peña 2020). “Puertos del Estado” is the State-owned Agency dependent on the Ministry of Transport, Mobility and Urban Agenda that, among other things, carry out coordination and harmonisation of strategies following the port policy guidelines of the Government of Spain at the 28 Port Authorities of the Spanish Port System.

In this research, which is based on the intensive and comprehensive work contained in de la Peña (2020), the authors synthesised the different SPP approaches of PAs, analysing what is common, what is new and what is different between them and highlighted the best practices within the industry. Due to the extensive content of an SP, in this first work authors have concentrated the analysis on any SP’s foundations; that means, the vision, mission, and corporate values of different PAs.

For this purpose, about 150 Port Authorities spread over all five continents were analysed.

2. OBJECTIVES AND METHODOLOGY

There are three main objectives to this work, namely:

- To assess how PAs approach the SPP, analysing the tools and methodologies that have been put in place by all of them,
- To determine what elements of the SPP are common and which ones are different among them, and
- To analyse new trends and good practices in SPP.

The paper is structured in four sections:

- Introduction.
- Objectives and Methodology.
- Discussion.



- Conclusions and limitations.

Analyses and Results included in the Discussion have been classified into two sections. Special Focus has been made on:

- Port Planning Tools and their implementation, term and accessibility/confidentiality: To determine the characteristics of the document itself (i.e. name, extension, and structure), its horizon (term), and the means used by Ports to make its strategy public.
- Scope and Content of the Strategic Plan: to determine the content of such a document, emphasising Mission Statements, Vision Statements, and Corporate Values.

The Authors have reviewed the SPs (or equivalent document with a different name) published by more than 150 PAs, Autonomous Ports and other types of public or private Port Entities (all together referred to from now on as ‘Port’ or ‘PA’ individually, or ‘Ports’ or ‘Pas’ collectively) covering different regions, sizes, port specialisation and governance models. The Authors have reviewed all the strategic information published by all these PAs on their respective official websites and eventual works published by the scientific community or practitioners (consultancy firms specialised in Strategic Planning and specifically with experience in the Port and Maritime Industry).

3. DISCUSSION

3.1. Port Planning Tools and their implementation, term and accessibility/confidentiality

Port management is comprised of a wide variety of planning activities that, in a simplified way, can be included in different types of documents that are classified by their horizon (short, medium, and long term) and by their scope (content or aspects addressed by the plan) (Table 1).

Table 1. Port Planning Tools

Type of Document	Typical Scope	
<i>Operational planning</i>	<i>Short-term allocation of resources and services provided by the port to its users.</i>	
<i>Business Plan</i>	<i>OPEX budgeting</i>	<i>The Annual allocation of resources to each of the activities and services provided by Ports.</i>
	<i>CAPEX budgeting</i>	<i>The Multi-year investment programme for acquiring the resources necessary for the port to develop its services.</i>
<i>Strategic Plan</i>	<i>Medium-term planning aimed at obtaining competitive advantages based on existing resources to increase the demand for port services.</i>	
<i>Master Plan</i>	<i>Long-term programming (one or more decades) for developing port infrastructures.</i>	

Source: UNCTAD (1993)

Apart from the categorisation provided above, (AAPA 1998) points out that two planning activities are closely linked to strategic planning such as “*corporate planning*” and “*market planning*”. The first provides a guide on how to focus on developing different lines of business and services to be offered (based on a definition of the port’s organisational structure). The latter must answer how to develop said lines of business in each of the target markets and shed light on the methods to promote these services in these markets.

Ports and terminals usually carry out Operational Planning on a daily, weekly, monthly, and quarterly basis, while it is very standardised that Business Plans are elaborated yearly to comply with annual budgetary and accounting obligations. However, the Master Plans and Strategic Plans’ horizon cannot be determined in an exact or univocal way. This is a subject that has not been closed in the academic field, and much less in the practical arena. This is probably because this “optimal” term



cannot be universally defined; since, among other things, it is dependent on the peculiarities of each Port and the dynamism of its environment or its social, economic or administrative reality.

Port Master Planning is a process focused on the physical development of the Port in long term perspective. For instance, the minimum period prescribed in article 54 of the Spanish Port Act² is 10 years, with 20-30 years being the term recommended by PIANC (2019). However, in recent years we have seen many plans, especially in Australia and the United States of America (USA), spanning 35-50 years (de la Peña 2020). In terms of Strategic Plans, the normal practice indicates that the term varies between 3 and 10 years, with the average being 5 years.

To formalise its strategy (either corporate or market planning), each Port chooses its path. In terms of the type of document that is used for developing their strategic planning, one of the main differences that have been observed in the macro-survey conducted in de la Peña (2020) is that there are three main sets of Ports:

- Ports that use a customised “*Strategic Plan*” like the ones used in other industries and described in (AAPA 1998) and (UNCTAD 1993).
- Ports formalising their entire strategy together with physical planning of its development in a wider Plan (formally different than a classical Strategic Plan) using a variety which is a standard within the entities managing major transport infrastructures. These documents are typically called “Master Plans” and are covered in (PIANC 2019).
- Ports that formally do not develop a proper comprehensive Plan (or do not make it accessible on the public domain) but have made it implicit in an isolated element of Strategic Planning such as the port’s mission or vision statement, its corporate values, or its strategic goals.

One of the findings of the macro-survey was that in a study of 85 major port authorities worldwide, approximately 50% made their Strategic Plans public on their respective websites. In contrast, the other 50% did not have a strategic plan or used another planning tool (Master Plan). For those who make it public (42 out of 85) an average term of its Strategic Plan is 5.7 years. However, there are relevant regional differences. While in the USA, the number of ports with a formally public Strategic Plan is 70%, in Europe it is 54%, 33% in Australia, or no PA in China or other locations in Asia (including PAs in Singapore, South Korea, Malaysia or Philippines) made its Strategic Plan available

Table 2. Port Authorities with a public Strategic Plan

	SAMPLE (NUMBER OF PORTS)	PORTS WITH A PUBLIC STRATEGIC PLAN	% PORTS WITH A STRATEGIC PLAN	AVERAGE TERM OF THE STRATEGIC PLAN
European Ports	48	26	54%	5
<i>Spanish Ports</i>	28	23	82%	5
<i>European Ports</i>	20	3	15%	8
USA Ports	20	14	70%	6
Australian Ports	6	2	33%	4
Chinese Ports	6	0	0%	n/a
Other Ports in Asia	5	0	0%	n/a
	85	42	49%	5.7

Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

Additionally, these differences at the continental level are also shown in a regional context. Thus, 82% of Spanish Ports counts with a Strategic Plan, while this percentage is only 15% (23 out of 28)

² Royal Legislative Decree 2/2011, of September 5, by which the Revised Text of the Law on State Ports and the Merchant Marine is approved



of the remaining European Ports are surveyed. It is worth mentioning that the Spanish Port Act does not legally require PAs to draft their respective strategic plan; but, this planning tool is advisable and formally defined in its article 53. As a result of this recommendation, most of them develop its SP, and all of them use other strategic management tools as the Balanced Scorecard, SWOT Analysis (included in its annual business plan) or strategic maps (with formal strategic themes, strategic goals, and targets).

In terms of the span covered by the Strategic Plans, shorter terms are seen in Australia (4 years) and Spain (5 years), while US Ports draft their Plans for 6 years and the remaining European Ports (other than Spanish ports) for 8 years.

From the data provided in the table above, we should not deduce that those Ports without a formal SP do not use strategic thinking in the course of their ordinary planning process, even in the most formal way. As mentioned above, some of them (especially in the USA, Australia, Canada, or the United Kingdom (UK)) prefer structuring their strategy in an *ad-hoc* port planning document called the Master Plan. In these cases, the planning goes beyond the mere strategic angles for coping with the port's future physical development in the long-term, facilitating the fusion of these two angles with the port's vision and mission. Another finding of this work is that in the USA, the bigger the port is, the more oriented the PA is to develop a Master Plan instead of a simple Strategic Plan.

As an example of the widely spread tradition of Anglo-Saxon Ports for embracing the use of the Master Plan, we could cite the Guidance on drafting Port Master Plans provided by the Department for Regional Development of Northern Ireland, Ports & Public Transport (DRDNI 2009). This work's primary focus is on aspects concerning public participation on the approval of the document rather than on defining its scope or content.

4. CONTENTS OF STRATEGIC PLANS

4.1. Process, Scope, and Content of Port Strategic Plans

SPP in port environments provides us with a simplified process that is fully applicable nowadays and is based on a seven-stage process (AAPA 1998): i) Evaluate the external environment for port planning; ii) define the port's mission, its goals, and objectives; iii) analyse the current situation of the port; iv) identify critical issues and key success factors; v) defines the strategic alternatives; vi) select the optimal strategy, and vii) implement said strategy through specific action plans.

This stepped approach described in AAPA (1998) does not differ from the general models that have been developed before or after those that have been implemented outside the port sector either for companies in the private sector (McKay 2001, Hambrick and Fredickson 2001, Wells 2015, Ball 2019), or the public sector and nonprofit organisations (Bryson and Alston 2005).

Simply stated and based on the recommendations and practical experiences compiled worldwide, a relatively common standard for SPP based on five differentiated stages is proposed by Kaplan and Norton (1995).

- **Phase 1: Preparation of the Plan.** In the first stage, the work is prepared before it is launched, including a definition of the scope that is to be provided to the SP. Also, a working group is established to prepare said work. This initial phase should culminate with the drafting of the terms of reference (specifications) that serve as a guide for further development, for the own directors and staff of the PA with the assistance of independent consultant(s).
- **Phase 2: Information Gathering.** In the second phase, all the information required for drafting the SP is collected, including an analysis of the current situation (market, clients, competition,



administrative framework, technology, etc.) and if deemed appropriate, this information is added to the inputs provided by different stakeholders through public or official participation. During this phase's delivery, it is common to find: i) a SWOT analysis, and ii) an overall description of the current situation.

- **Phase 3: Foundation of the Strategic Plan.** Based on the previous stage's information, the drafting team usually lays the foundations for the Strategic Plan. These foundations include the Port's mission and vision statements, the selection of the core values, and the establishment of some specific policies (the latter is not as common as the first two points). To accomplish this, the key factors and the goals and objectives to be pursued are explicitly defined.
- **Phase 4: Drafting the Plan and defining of Strategies and Action Plans.** In this phase of the work, the drafting team will develop the Strategic Plan itself by selecting the most appropriate strategies based on the analysis of the existing situation (stage 2) and the future aspirations of the port (stage 3). During this phase, the strategic objectives are implicitly drafted as well as the course of actions required to pursue them. Additionally, the indicators and metrics to monitor them are established in the next stage. As a product of this phase, a concrete action plan should be made available. In the Action Plan three basic elements are usually defined: i) who is the leader and his/her team; ii) what is the associated budget, and iii) the schedule and deadlines.

As a result of this phase, some Ports plot a Strategic Map to synthesise their entire strategy. This is the case for 100% of Spanish Ports, which: i) update this Map yearly as a standardised process included in their respective Business Plans, and ii) monitor the indicators included in the Map on a monthly/quarterly/yearly basis depending on the metrics defined for each indicator. However, despite its benefits and the fact that it is widespread in other contexts, this tool's use outside of this specific set of ports has not been confirmed.

- **Phase 5: Implementation.** Once the Plan has been drawn up and approved, the process should continue with its implementation, including periodic monitoring of the Plan (identifying those responsible for carrying it out), its evaluation (which requires having the aforementioned indicators) and if necessary, its revision. This phase's product is usually documented in periodic reports where adjustments and updates to the plan are usually introduced. Once the goals of the Strategic Plan are met (requiring new ones be established), the term of the Plan is reached, or the environment in which the Plan was drafted has substantially changed. The strategies have, therefore become outdated³, Ports will begin the process of defining a new Strategic Plan.

Although the strategies are formulated by each Port and the process followed for approving the SP and how it is drafted may vary substantially from one PA to another, the scope and content of the Plan are practically invariable. Thus, the vast majority of the SPs developed by Ports reveal a fixed structure of the content, which always includes the following elements:

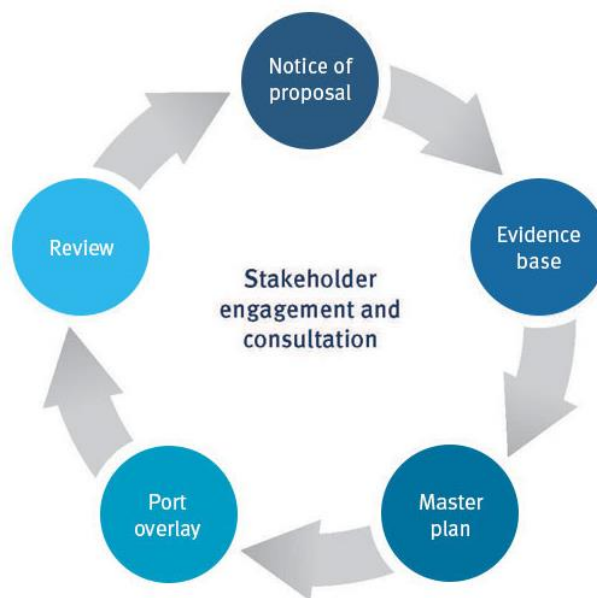
1. Diagnosis of the Situation / Environmental Screening,
2. SWOT Analysis,
3. Vision Statement,
4. Mission Statement,
5. Core Values and Key Success Factors,
6. Strategies / Goals & Targets,

³ We are currently undergoing a situation that recommends reviewing the approved Strategic Plan. We must analyse how the COVID19 pandemic has affected the Port and Maritime Industry. No very far back in time, the world experienced another event that prompted a thorough revision of SPs. This event was the Global Financial Crisis of 2008.

7. Action Plans.

Some differences exist between the phases and processes followed by different Port Entities in developing and approving their SPs and the visibility of the different parts of the Plan. One of the findings of this research is that Ports in the Anglo-Saxon world place more emphasis than other Ports on engaging multiple shareholders and ensuring wide public participation when drafting the plan (PIANC 2019, DRDNI 2009). For instance, while in some Ports of Australia (DSDGQ 2016), the port master planning includes statutory consultation requirements⁴ (Figure 1), in other environments this public consultation phase is not mandatory by law (although it is becoming increasingly more common). However, some jurisdictions choose to develop two different Planning Tools, with the Master Plan is the only document submitted for public information. In contrast, the SP's referral for public consultation is an option that is available to the governing bodies. In the latter cases, the Master Plan focuses on physically constructing port infrastructures. Its roads and railway connections are one of the reasons (if not the main reason) for using the Master Plan for the Environmental Impact Assessment. In contrast, the Strategic Plan focuses on a wider range of aspects (commercial, operational, business orientation, etc.) that can be kept at least partially confidential. Some PAs and regulators have trouble finding a balance between the need for transparency and accountability, and the need for keeping commercial information confidential in order to ensure that ports are in the best possible position to compete on the market.

Figure 1. Priority port master planning process.



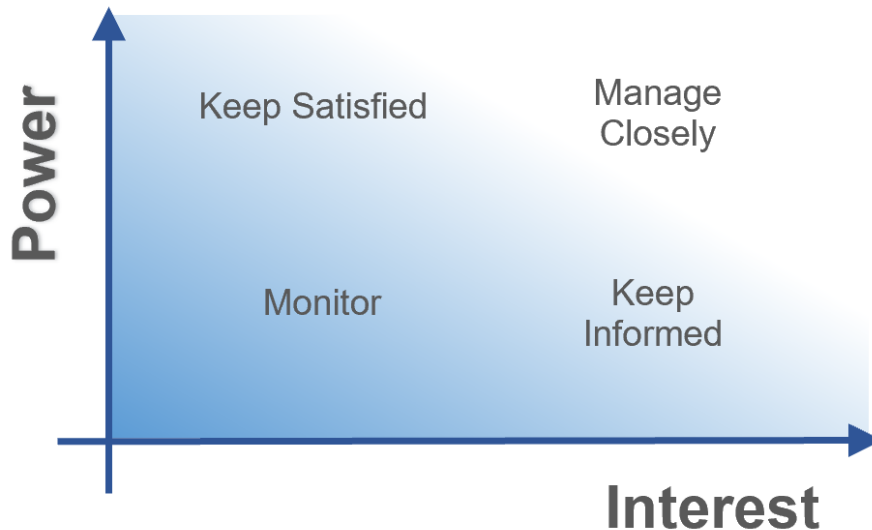
Source: Department of Transport and Main Roads. State of Queensland (Australia)

Commonly, Ports deciding to submit the SP to public consultation (either compulsory or voluntarily) start the process with the so-called “*Shareholders Engagement Plan*” (Mok, Shen and Yang 2015). In this preparatory work, the Port’s main groups are identified, and the real power or influence that they may eventually exercise over its operations is assessed. In sum: 1) groups with a high level of power and interest are considered a priority and specific tools are developed for reaching out to them and collecting their concerns to the maximum extent possible (groups to manage closely); 2) groups with high interest but restricted power are the targets of informative actions (groups to keep informed); 3) groups with limited interest but high power are stakeholders that must be satisfied in

⁴ Master planning for priority ports in Queensland (Australia) is a port-related action of the *Reef 2050 Long-Term Sustainability Plan* (Reef 2050 Plan) and mandated under the Sustainable Ports Development Act 2015 (Ports Act). This legal framework obliges the ports of Gladstone and Townsville to involve stakeholders in the development of the plan.

order to prevent them from boycotting the plan (groups to be kept satisfied), and 4) the remaining groups with limited interest and power are those that probably do not need specific actions but need to be monitored in case an increase in either their interest or their power is observed (Roseke 2018)(Figure 2).

Figure 2. Priority port master planning process.



Source: Roseke (2018)

4.2. Port Vision

To meet the first core content of any SP, an appropriate Vision Statement (“VS” in singular or “VSs” in plural) must be drafted. In this study, the VSs of 169 PAs have been analysed.

It is evident that the Port’s location and size, its model of governance and regulatory implications, the structure of its traffic and logistic chains, competitiveness factors, cultural aspects, etc., strongly affect how each Port defines its desired and envisaged future. However, as suggested by some authors, Ports’ common characteristics directly affect how these entities formulate their VSs (Larwood at *al.* 1995). VSs share characteristics such as conciseness and include attributes related to the public-policy decision environment in which they operate.

Based on the public information provided by PAs in their respective websites, we can conclude that Ports have a strong long-term strategic culture and 59% of them make public the VS that guides their development and their decision-making process. However, the degree of implementation is quite different depending on the region; it is outstanding in America, Oceania and Asia (China excluded) and surprisingly very poor in Europe (except in the case of Spanish Ports) (**Table 3**).

Ian Wilson developed a comprehensive model to assess the characteristics of VSs based on the study of a large group of companies⁵ (Wilson 1992). According to this author, it is recommended that VSs include six basic attributes (“**W-At**”): i) scope of the business; ii) scale or size of activities; iii) target products and markets; iv) competitiveness; v) image and relationships and vi) organisation and culture. After analysing the VSs of International Ports’ content and adopting Wilson’s model, we

⁵ Wilson model is a relatively spread model in strategic planning literature. However, it is clear that the number of attributes are not relevant for those authors and practitioners defending the need for a short, concise and easily remembered VS. This approach prefers that stakeholders can easily understand and identify the VS of the company and getting in a large number of attributes would seem to go in the opposite direction.

observed that 18% include 6 W-At, and approximately 50% include 4 or more. The most common value seen in this group is that most VSs only include 3 out of the 6 W-At. (figure 3).

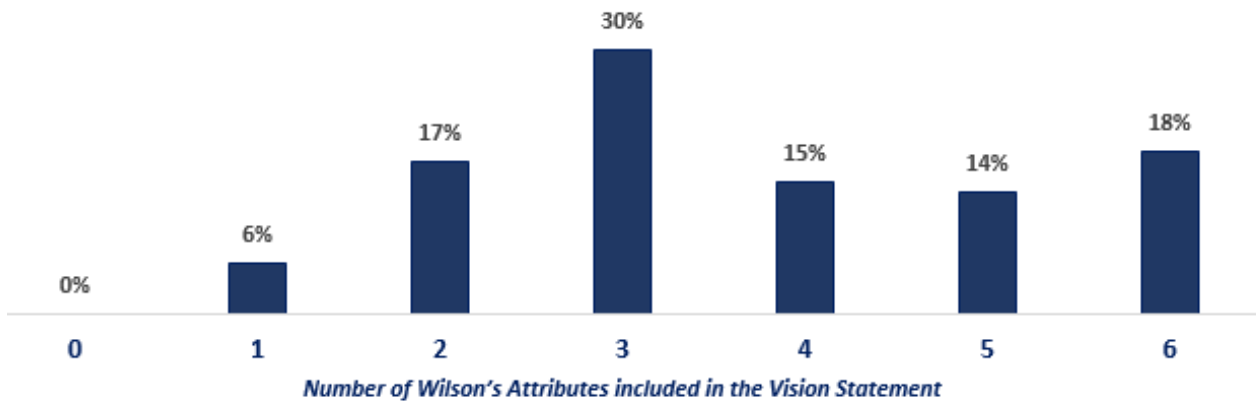
Table 3. Deployment of vision in International Ports

	NORTH AMERICA	EUROPE (EXCLUDING SPAIN)	ASIA (EXCLUDING CHINA)	AFRICA & MIDDLE EAST	SOUTH & CENTRAL AMERICA	OCEANIA	TOTAL
SAMPLE /(NUMBER OF PORTS CONSIDERED)	22	76 (48)	25 (15)	19	15	12	169
NUMBER OF PORTS WITH ACCESSIBLE PUBLISHED VISION STATEMENT	22	37 (15)	15 (13)	13	15	11	100
PERCENTAGE	100%	49% (31%)	60% (87%)	68%	100%	92%	59%

Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

Figure 3. Percentage of Wilson’s attributes included in the VSs of international ports.

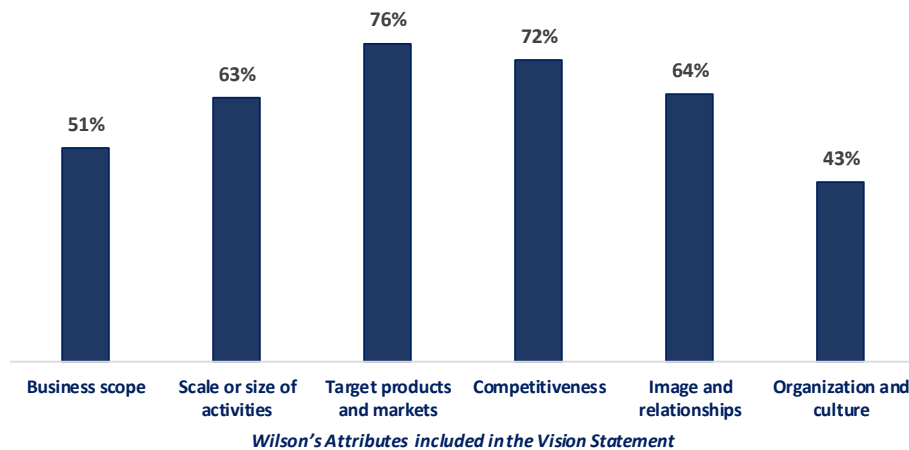
Vision Statement of International Port Authorities



Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

Figure 4. Frequency in which an attribute of Wilson’s Model is included in the VSs of international ports

Vision Statement of International Port Authorities



Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

The most repeated W-At in the international port environment is the “*target products and markets*” covered by 76% of the Ports. The occurrence of the attribute “*competitiveness*” is 72%, preceding “*image and relationships*” (64%) and “*scale or size of activities*” (63%). In the last positions of the queue of merits, it is found “*business scope*” (51%), and the last one is “*organisation and culture*” (43%) (figure 4). This result differs from the average of other private companies (de la Peña 2020). A comparison with a set of international corporations out of the port and maritime industry reveals that the only attribute that is more repeated in the case of PAs is competitiveness (**Erro! Autorreferência de marcador inválida.**) which may also be a consequence of the conciseness of the VSs adopted by PAs versus other type of companies.

Figure 5. Percentage of Wilson’s Attributes included in private companies and Port Authorities

Percentage of Wilson Attributes included in the VS of International Corporations and Port Authorities



Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

4.3. Port Mission

Other key element that represents the foundation of any SP is the Mission Statement (“MS” in singular and “MSs” in plural). The origins of MSs can be found on the guidelines provided by P. Drucker in 1974. This author was a pioneer in assessing the need for a proper formulation of this component within the SPP (Drucker 1974). Following this first work, J.A. Pearce discussed how an adequate definition of a company’s mission is a powerful strategic tool (Pearce 1982). This author jointly with his colleague F.R. David developed a theoretical model for assessing the content of MSs (Pearce and David 1987) that has been widely used with some adjustments to cover the changes made to strategic management in the course of the time (Dharmadasa *et al.* 2012).

For these authors, MSs should be the most visible and public part of an SP, and they provided a guide for developing the most appropriate statements focusing on nine key elements:

1. Customers and/or markets,
2. Products and/or services,



3. Core technologies,
4. Geographic domain,
5. Expression of commitment to survival, growth, and profitability,
6. Key elements in the company philosophy,
7. Company self-concept (distinctive competence),
8. Firm's desired public image,
9. Concern of employees.

A larger and more up to date literature covering the formulation of MSs can be found in de la Peña et al. (2019). This work specifically addresses how MSs are formulated in a specific Port System, reaching interesting conclusions in terms of the formal aspects (length of the statements) and their contents (how MSs of PAs embrace the Pearce & David model mentioned above). More recently, de la Peña (2020) expands the number of Ports reviewed by de la Peña et al. (2019), offering an assessment covering a larger sample of 149 Ports distributed throughout all five continents.

Three main conclusions can be drawn from this last work:

- The average length of the MS of the PA analysed in this work is 32 words, which is shorter than the standard it is compared to. For example, (Clearlogic 2018) uses an average of 45 words and (David and David 2003), (Davies and Glaister 1997) and (Kemp and Dwyer 2003) an average of 100 words⁶.
- The MSs of the Ports analysed (28 in total) include more recurrently seven of the nine key elements analysed by Pearce and David (1987) and Dharmadasa *et al.* (2012). Only “*technology*” and “*concern of employees*” are items less frequently covered by the MSs of the ports that were analysed. The ranking of items covered by these ports is relatively similar to the high-performance firms’ ranking conducted Pearce and David (1987). In both cases, three out of the first four topics are “*philosophy*”, “*self-concept*”, and “*concern for public image*”. Another item like “*Product / services*” is the main topic covered by these Ports and low-performance firms, and it is also the third element in the study conducted in Dharmadasa *et al.* (2012). However, it only reached number seven in the high-performance firms’ ranking in Pearce and David (1987).
- In terms of the semantic content, the most used word⁷ / concept in MSs is “*port*”, followed by “[*port*] *service(s)*”, “*development*”, and “*economic*”. Other words such as “*hinterland*”, “[*add*] *value*”; “*sustainable*”, “*infrastructures*”, “*competitiveness*”, and “[*area of*] *influence*” can also be found in many VSs.

Other additional interesting findings are provided in de la Peña (2020), namely:

- The number of Ports that publish their MSs on a public domain is significantly high (69%). However, there is a substantial geographic dispersion. While in North American Ports 100% of the MSs are made public, in European ports barely 40% of the MSs are public (once again an exception is made in the case of Spanish Ports where 86% of the MSs are public). For Ports in Africa and the Middle East, 89% are public, while in Oceania and Asia it is 75% and 48% respectively (except in the case of the Ports of China, where again, in most cases the information either does not exist or is not publicly accessible)(**Erro! Autorreferência de marcador inválida.**).

⁶ The same concern related to Wilson's Model related to the length of VSs *versus* the convenience of short, concise and easily remembered VSs can be also raised in connection with MSs and Pearce & David model for their formulation.

⁷ The use of word count analysis in examining MSs may provide for further research fields. The analysis made by [21] should be tailored and fine-tuned to come up with strategic factors, themes or directions instead of single words of group of words.



Table 4. Sample of international Ports to determine the scope of Mission Statements.

	<i>NORTH AMERICA</i>	<i>EUROPE</i>	<i>AFRICA & MIDDLE EAST</i>	<i>SOUTH & CENTRAL AMERICA</i>	<i>ASIA</i>	<i>OCEANIA</i>	<i>TOTAL</i>
Sample (Number of Ports)	28	48	19	17	25	12	149
Ports with a mission statement that is made public (Number of Ports)	28	19	17	17	12	9	102
Percentage (%)	100%	40%	89%	110%	48%	75%	69%

Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

The issue of public dissemination of certain “strategic” information is an interesting topic for future dissertations. As rightly pointed out for one reviewer of this manuscript, it is not clear that making Port Strategy public reveals sensitive information that should be preserved confidential. In fact, there is a substantial number of sources easing to collect business information from a port and its hinterland (for instance PA’s reporting services, the AIC data for ship movements, official statistics from governmental and para-governmental agencies, etc.). We agree with this reviewer that offering competitive information is worth a lot less than some PAs think. In other words, it’s really hard to conceal an initiative to impede a competitor (terminal or sister port) to capture specific traffic or business line.

1. On average, the length of MSs is 35 words. Ports with longer MSs are located in Africa and the Middle East (42), followed by Europe (40) and North America (36). The shortest statements are found in South America, Central America (31) and Oceania (24). By contrast, the ports of Southampton (UK), the Suez Canal Authority (Egypt), and Genoa (Italy) have very lengthy statements (116, 111, and 109 words respectively) and the ports of Helsinki (Finland), Peer Ports (UK) and Dubai (UAE) have very short statements (6, 6, and 7 words respectively) (**Table 5**).

Table 5. Length of mission declarations at international ports

	<i>NORTH AMERICA</i>	<i>EUROPE</i>	<i>AFRICA THE MIDDLE EAST</i>	<i>SOUTH AND CENTRAL AMERICA</i>	<i>ASIA</i>	<i>OCEANIA</i>	<i>TOTAL INT. PORTS</i>
MAX	70	116	111	75	73	50	116
MIN	9	6	7	10	10	9	6
AVERAGE	36	40	42	31	28	24	35

Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

4.4. Values

Company values, together with mission and vision statements, are essential elements of any company. While some authors state that they represent its genetic code and are the maximum expression of its identity, vocation, and reason for being, others think that this is to impute very high motives for a few words that only could seek that major stakeholders are appeased. Be that as it may, every organisation has a distinctive culture, and it is ideally collected in the aforementioned terms, establishing the foundation upon which to build its Strategic Planning (Wells 2015).

Companies that are successful in the long-term define their *core values* and the *core purpose* of their activity (Collins and Porras 1996). Both represent their *core ideology* and remain unchanged



even when strategies are modified to adapt to a changing world. Values must be inspirational and meaningful for both the members of the organisation and stakeholders or company observers. These authors highlighted some of the key elements of a company's values and ideology, reaching the following conclusions:

1. Successful companies do not necessarily define humanistic or politically correct values (although some do). Even when there are elements that seem essential, these do not have to be included in the company's values if there are operating procedures and practices in place at the companies that cover them.
2. By studying the values of a large number of successful companies, we can conclude that none of them defined more than five, with the average being between three and five. These authors warn about having confusing values that are really central to the company in terms of operational practices, business strategies, or cultural norms. This usually happens when a manager is asked to list its company's values, and he/she provides a list comprised of more than five values.
3. Unquestionably, there is a set of *universal values* that should be valid for all companies (for instance full respect of human rights, taking care of the safety and health of its employees, respecting the laws or carrying out its activities in a sustainable way). However, each organisation should adopt its own values after it has undergone a critical thinking process aimed at defining its own identity.

Table 6. Statistical analysis of the values published by international ports

	EUROPE	NORTH AMERICA	SOUTH AND CENTRAL AMERICA	ASIA	AFRICA AND THE MIDDLE EAST	OCEANIA
Sample (Number of Ports)	34	31	20	26	24	13
Ports with corporate values that are accessible to the public	12	14	12	8	10	12
%	35%	45%	60%	31%	42%	92%
Average	4.5	7.0	5.4	4.6	3.6	4.7
Max	9	12	9	7	5	6
Min	3	3	3	2	2	3
Statistic Deviation	2.1	3.0	1.7	1.5	1.0	1.1
Statistic Mode	3	5	5	5	3	5

Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)

A statistical analysis of the values stated by these Ports has been synthesised in Table 6. The most relevant conclusions are listed below:

1. A very significant sample has been analysed (148 Ports). Forty-six per cent (46%) make their values public on the websites or in annual reports. The Ports with the most accessible values are those in Oceania (92% of these Ports publish their values) and, again, European ports (excluding the Spanish ones) are less likely to be transparent in this regard (35%).
2. The most repeated number of values is 5 (America, Asia, and Oceania), and 3 (Europe and Africa and the Middle East). This falls in line with the recommendations above. However, in practice, this average is lower than those of the large international corporations (with an average of 5.6) listed in de la Peña (2020).



3. The averages range from 7.0 in North America to 3.6 in Africa and the Middle East, with the other geographic areas ranging between 4.5 and 5.5.
4. The port with the most explicit number of values is Lázaro Cárdenas in Mexico (12). Those with fewer declared values are Ningbo-Zhoushan in China and Salalah in the Sultanate of Oman (with just 2 values).

Ports that have their values published on their respective websites (68 out of 148) provide a sample of 338 values. The values that are more commonly mentioned by this sample are worth analysing. The result of this analysis has been listed in Table 7 and is summarised as follows:

1. The most frequent corporate value is “*Customers*”, which was present on 27 occasions (8.0%), followed by “*Integrity*” with 25 repetitions (7.4%), “*Innovation*” and “*Excellence*”. both with 19 (5.6%), and “*Respect*” with 18 (5.3%).
2. However, regional differences exist that are probably conditioned by, among others, various cultural, socio-political, economic and environmental factors. Specifically, the ports of North America, Asia, and Africa or the Middle East are the ones that most frequently use the value “*Customer*”⁸, while “*Respect*” and “*Integrity*” are more common in Europe and Oceania respectively.
3. The value “*Customer*” appears in the top 10 at all locations except for Oceania. Similarly, “*Integrity*” is a value shared by all ports in the top 10 except in Asia and “*Excellence*” is present at all locations except North America.
4. The value of “*Innovation*” is used at all geographical locations and in some cases, it is found high in the ranking. This value is ranked second in Oceania, Africa, and the Middle East.
5. “*Sustainability*” or “*Environment*” appear in the top 10 at all geographic locations except South and Central America, Africa, the Middle East, and Oceania.
6. “*People*” and/or “*Teamwork*” are priority values at all locations except South and Central America.

5. CONCLUSIONS AND LIMITATION OF THE RESEARCH

As a summary of the discussion provided by this study, three results are worth highlighting:

1. In general, Ports enjoy an excellent strategic culture and have established formal procedures for devising a strategy document and periodically keeping it updated.
2. However, regulatory requirements and other factors may affect how each Port conducts its respective Strategic Planning Process. This matter affects not only the form used for the Plan (i.e. type of document) but also the substance (i.e. its contents). While some ports draft proper Strategic Plans, others embrace a Master Plan (typical tool of Strategic Planning especially developed for infrastructure development) and some of them use isolated elements of a formal SP without following the typical structure found in these types of documents.
3. The Size and Degree of Specialisation of Ports affect the way Port Planning is approached. Regional differences determine how Ports conduct their respective Strategic Planning Processes. A good example of it can be found in different regional averaged approaches for Vision, Mission, and Corporate Values formulation.

⁸ The term ‘customer’ is a very interesting and eternal topic in the port industry. Many ports see the customer as the ocean carrier, the terminal operator, and to a lesser extent the outbound logistics, and third party’s logistics or 3PLs. Others Ports consider ‘customer’ the cargo owner and broader any entity being in the position to choose the port to be used in the entire supply chain.



Table 7. Frequency of presentation of values in international ports

	TOTAL	EUROPE	NORTH AMERICA	SOUTH AND CENTRAL AMERICA	ASIA	AFRICA AND THE MIDDLE EAST	OCEANIA
1	27 - Customer	6 -Respect	8 - Customer	13 - Customer	6 - Transparency	6 - Customer	7 - Integrity
2	25 - Integrity	4 - Customer	8 - Integrity	7 - Teamwork	4 – Responsibility	5 - Innovation	6 - Innovation
3	19 - Innovation	3 - Excellence	6 - Respect	7 - Respect	2 - Service	4 - Excellence	6 - Safety
4	19 - Excellence	2 - Sustainability	6 - Leadership	6 - Leadership	2 - Security	4 - Growth (Expansion)	5 - Excellence
5	18 - Respect	2 - Safety	4 - Teamwork	5 - Innovation	2 - Promotion	4 - Committed	4 - Respect
6	12 - Teamwork	2 - Responsibility	4 - Innovation	5 - Excellence	2 - Productivity	2 - Teamwork	3 - Diversity
7	10 - Safety	2 - Personal	4 - Environment	5 - Environment	2 - Loyalty	2 - Integrity	2 - Wellbeing
8	8 - Service	2 - Loyalty	3 - Transparency	4 - Sustainability	2 - Innovation	2 - Efficiency	2 - Teamwork
9	8 - People	2 - Integrity	3 - Sustainability	4 - Service	2 - Excellence	1 - Technology	2 - Responsibility
10	8 - Efficiency	2 - Innovation	3 - Service	4 - People	2 - Competitiveness	1- Sustainability	2 - Professionalism

This table represents the frequency with which certain values are used at certain geographical locations. The number that precedes the value indicates the frequency with which it appears. Therefore, “27-Customer” appearing in a box indicates that the Value “Customer” or its plural or synonymous word or words with a very similar meaning such as “Client”, have been used in that group on 27 occasions. For the purpose of ensuring a consistent analysis, in the case of Spanish speaking ports, the values have been previously translated

Source: Technical Association of Ports and Coasts (Spanish section of PIANC) (de la Peña, 2020)



Unfortunately, during this study we experienced some limitations and difficulties.

1. First, the study was limited because the SPs developed by some Ports were not accessible. Some PAs decided not to make their strategic plans public, while others only published a summary of its contents and others made the full document available. It is important to take this into account since the references used for this study were limited to information available to the general public. For this reason, certain biases may have been introduced in the study.
2. Secondly, the research was hampered by a big amount of data. Therefore, we had to build a comprehensive database beforehand in order to properly manage all the information.
3. Finally, the extensive contents of a strategic plan limit the scope of this work. In future studies we will cover the strategic objectives, themes, and core areas of different Ports as well as their respective actions plans and the mechanism for implementing, monitoring, evaluating, and updating the Plan. For more information on this issue, all these matters have been effectively discussed in de la Peña (2020).

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maritime transport among his most innovative research, it is worth highlighting the research on complex networks of maritime transport related to the foreland area.

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